## AMENDMENTS TO THE SPECIFICATION WITH MARKINGS TO SHOW CHANGES MADE

**Replace** the following paragraphs:

-- **[0033]** There is further shown in FIG. 1 a probe 46, which is configured as an elongated needle for insertion through a surgical incision 4.1 at the area of the pars plana 4 into the vitreous humor 5.1. The probe 46 has a diameter of about 1mm and has an inner diameter of about 0.8mm. Axially disposed within the probe 46 is a rod with a front end projecting from the probe 46; a head piece 50 is disposed at the front end of the rod which is configured for the grasping, retaining and holding of micro ~~strikers~~ structures. Preferred embodiments and variations of the headpiece 50, which is configured as a grasping element, are described in the following paragraphs.--;

-- **[0050]** FIG. 13 shows a section of the tube shaped probe 46 and the rod 47 co-axially disposed therein on an enlarged scale. The head piece 50 configured as a second variation in an open position is seen at the front end of rod 47. The rod 47 is divided into two arms 47.1 and 47.2 by means of the slot 52 and at their opposing corresponding sides each is provided with gliding planes 51 and 51.1. that are inclining in the direction of the head piece 50. The two arms 47.1 and 47.2 are spread apart or bent open relative to each other respectively relative to the symmetrical axis S-S. At the front area, arm 47.1 is provided with a recess 55.1 which is frontally bounded by an interiorly circular arc profiled first

wall and a leg 54 integrally formed thereon. The other arm 47.2 is provided with a second recess 55.2, which is frontally bounded by an interiorly circular arc profiled wall 53.1 and a leg 54.1 integrally formed thereon. In the ~~open~~ closed position of the headpiece 50, the two recesses 55.1 and 55.2 form recess 55.--;

--[0053] In FIG. 17, a further variation is shown in a 3-dimensional view of the ophthalmologic instrument 25 (FIG. 3) with functional unit 35 in threaded engagement with the guide sleeve 45. This variation differs from the embodiment as depicted in FIG. 4 and FIG. 5 in that a first tube piece 36 is supported at one end of the probe 46 and at the other end a second tube piece ~~36~~ 38 is attached to probe 46. The front end of rod 47 with the head piece 50 is configured as a catching element which is co-axially supported in the second tube piece 38 and projects eccentrically through the probe 46 which is configured as a hollow needle and the first tube piece 36. The first tube piece 36 with probe 46 and the second tube piece 38 together with the actuator 40 as depicted in FIG. 4 and FIG. 5, form a unit which is slidable in axial direction.--

--[0054] In the area of the guide sleeve 45 an inlet opening 37 is provided which corresponds to the dimension of a light guide 22 in the first tube piece 36 through which the light guide 22 is inserted into the interior space 46.1 (FIG. 18) of probe 46. As depicted schematically in FIG. 17, the light guide 22 which is projecting from the exit opening 49 is exteriorly disposed at second tube piece 38 in such a manner that the light emitted at the front side 23 is illuminating the

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recess 55 of head piece 50.--;

--[0058] In FIG. 20, the frontal part is shown in a top view on an enlarged scale along arrow F in FIG. 17 and the tube shaped probe 46 with an exit opening 49 and the second tube piece 38 disposed thereon with the head piece 50 in closed position. Further shown in FIG. ~~19~~, 20 is the light guide 22 disposed at the frontal tube piece and projecting through the outlet opening 49. The light guide 22 can be attached to the second tube piece 38 by means not shown here in detail. The light guide 22 is preferably provided with a frontal side 23 that is sloped relative to a longitudinal axis, by means of which the light rays 59 of the light bundle 58 at a restricted spatial angle can be directed to the recess 55 of the head piece 50. In another embodiment, a lens is disposed at the frontal side 23 of light guide 22 or the light guide itself is configured as a lens. --;

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## AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1. (Currently amended) An ophthalmologic instrument for microsurgery in an eye comprising:

- a housing configured as a handle and a functional unit disposed thereon and an actuator supported within the housing in operative engagement with a sliding pin and connected with the functional unit; and
- a tube shaped probe, which extends into a head piece and is movable in axial direction relative thereto for operative engagement with the functional unit; and
- a rod co-axially supported within the probe ~~which extends into a head piece~~ configured as a grasping element and having two arms separated by a slot, the two arms are configured with distal end portions which are substantially transverse to the longitudinal axis and delimiting a recess opposing one another and are movable relative to one another into an elastic pre-tensioning first position wherein both arms are spread apart and a second position wherein the end portions terminate into opposing end faces, which when ~~of~~ both arms are pressed together form ~~into~~ a flush closure such that the two opposing recesses are formed together into a common recess for freely retaining and holding micro structures without squeezing or pinching the microstructures, and wherein the two arms starting from the cylindrical rod in direction of the frontal face of

the head piece are tapered off with opposing outside walls of the taper configured in one of a straight or an arcuate shape.

2. (Original) The microsurgical instrument of claim 1, further comprising a light guide connected to a light source and coordinated with the headpiece which projects from the probe in the direction of the common recess formed by the two arms.

3. (Original) The microsurgical instrument of claim 2, wherein the light guide has a front face from which light rays can emanate and be directed to the recess.

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4. (Original) The microsurgical instrument of claim 2, wherein the front face of the light guide is configured as a convex optical lens.

5. (Original) The microsurgical instrument of claim 4, wherein the front face of the light guide is provided with an optical lens.

6. (Amended) The microsurgical instrument of claim 2, wherein the front face of the light guide is configured in slanted ~~relative~~ relationship to the longitudinal axis of the light guide, which is directed toward the recess.

7. (Currently amended) The microsurgical instrument of claim 1, wherein each

of the recesses ~~of~~ are bounded frontally by claw-like shaped legs integrally formed at the two arms and configured in such a way that when the arms are brought into a closed position, opposing edges of the legs can be pressed together for a flush closure.

8. (Original) The microsurgical instrument of claim 7, wherein each of the legs are provided with an edge which oppose one another and which are of a size smaller than one half the diameter of the rod having a cylindrical shape.

9. (Original) The microsurgical instrument of claim 1, wherein the recess of each of the arms starting from a frontal leg thereof in direction of the slot is arcuately shaped such that in a closed position the common recess has the shape of a tear drop

10. (Original) The microsurgical instrument of claim 9, wherein an inside length of the tear drop shaped recess is greater than the inside width of the tear drop shape.

11. (Original) The microsurgical instrument of claim 1, wherein the recess of each of the arms each starting from a frontal leg thereof in axial direction of the slot is arcuately shaped such that in a closed position the common recess has an elongated shape.

12. (Original) The microsurgical instrument of claim 11, wherein the inside length of the elongated common recess oriented in axial direction of the headpiece is smaller than then the inside width, which is oriented perpendicularly thereto.

13. (Original) The microsurgical instrument of claim 1, wherein the recess of each arm each starting from a frontal leg thereof in axial direction of the slot is arcuately shaped such that in a closed position the common recess has a circular shape.

14. (Original) The microsurgical instrument of claim 13, wherein the inside diameter of the circular shaped common recess is substantially the same as the outer diameter of the tube shaped probe.

15. (Original) The microsurgical instrument of claim 1, wherein the two arms starting from the cylindrical rod in direction of the frontal face of the head piece are tapered off with opposing side walls of the taper configured in one of a straight or an arcuate shape.

16. (Original) The microsurgical instrument of claim 1, wherein the cylindrical rod comprises two portions connected to each other, each of the portions having a profile cross section configured in semicircular shape which extend at one end into a head piece of claw-like configuration and a recess.

17. (Original) The microsurgical instrument of claim 2, wherein the tube shaped probe is configured for receiving the rod and the light guide and provided at one end with a first tube shaped piece supported in a guide sleeve and at the other end provided with a second tube shaped piece for co-axially supporting the rod.

18. (Original) The microsurgical instrument of claim 17, wherein the probe with the first tube piece and the second tube piece are formed as a unit which is axially movable relative to the head piece provided with the stationary rod.

19. (Currently amended) The microsurgical instrument of claim 17, wherein the first tube piece is provided with an inlet opening for insertion of the light guide is formed at the upper portion of the probe and axially at a distance an exit opening for exiting of the light guide.

20. (Original) The microsurgical instrument of claim 19, wherein the end of light guide exiting from the opening is disposed at the outer wall of the second tube piece.

## REMARKS

The last Office Action of January 31, 2003 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-20 are pending in the application. Claims 1, 6, 7 and 19 have been amended. No claims have been canceled. No claims have been added. A total of 20 claims is now on file. The claim surcharge is enclosed.

It is further noted that claim 6 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-6 and 16-20 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 5,746,770 (hereinafter "Zeitels ").

Claims 1, 7, 9, 10 and 15 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 52,549,731 (hereinafter "Wattley ").

Claims 1, 7, 8, 11, 12, 13, 14, 15 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 5,797,958 (hereinafter "Yoon ").

### CLAIM OBJECTION

The Examiner has objected to claim 7 regarding the phrase "the recesses of are bounded by...". Applicant has amended the claim to correct the phrase, which has been done by the above amendment. The objection has thereby been obviated.

**REJECTION OF CLAIM 6 UNDER 35 U.S.C. §112, FIRST PARAGRAPH**

Applicant has amended claim 6 to address the problems raised by the Examiner. These changes are self-explanatory, so that further discussion is not necessary.

Withdrawal of the rejection of claim 6 under 35 U.S.C. §112, first paragraph is thus respectfully requested.

**REJECTION OF CLAIMS 1-6 AND 16-20 UNDER 35 U.S.C. §102(b) AS BEING ANTICIPATED BY ZEITELS.**

The rejection under 35 U.S.C. 102(b) is respectfully traversed.

Applicant has amended claim 1 by setting forth the relationship between the probe and the closing arms of the instrument. Applicant has further precisioned the claim by reciting the configuration of the end portions of the arms and the edges which form an abutting relationship for closure. Furthermore, the tapering shape of the closing arms have been included in claim 1. It is believed by the foregoing amendment to the claims, the cited prior art is hereby distinguished.

Zeitels discloses a surgical clamping instrument. As shown in the drawings the clamping function is carried out by two opposing arms that are pressed together to thereby create a jaw-like function for holding and clamping a tissue structure. The clamping portion of the arms are shown enlarged in Fig. 9 as tooth-like structures. Upon closing, the opposing teeth engage with each other

as described in col. 3, line 45. Zeitels does not disclose that the end portions are configured substantially transverse to the longitudinal axis. In contrast, the claimed invention is not a clamping instrument but a grasping and holding instrument as described and shown in FIG. 2. The Zeitels instrument does not disclose opposing recesses as claimed here but instead discloses opposing teeth for clamping the tissue pieces as describe in col. 3, line 45. Clearly the Zeitels instrument does not have the same structural requirement nor could it function in the way as the presently claimed instrument.

Applicant has also amended claim 19 to point out where the opening is formed.

Since Zeitels discloses only toothed clamping surfaces for clamping tissue and does not disclose recessed end portions, which upon closing are holding the tissue structures freely, this reference does not anticipate the invention as claimed in claim 1. Accordingly, the remaining dependent claims also contain all the limitations of claim 1 and therefore likewise are not anticipated by Zeitels.

Withdrawal of the rejection of claims 1-6 and 16-20 under 35 U.S.C. §102(b) is thus respectfully requested.

**REJECTION OF CLAIMS 1, 7, 9, 10 AND 15 UNDER 35 U.S.C. §102(b) AS BEING ANTICIPATED BY WATTLEY.**

The Examiner has now rejected the original claims as unpatentable over Wattley. The Examiner's determination of anticipation is earnestly traversed.

Neither claim 1 as originally drafted nor as presently presented is anticipated by the Wattley reference. Wattley discloses a clamping instrument for electronic wires and has nothing to do with ophthalmologic surgery.

The claimed invention requires a configuration not present in the Wattley instrument including the structure of the arms the end portions of the arms and the outside tapered walls of the head piece. Wattley does not disclose these structures. Futhermore, the movement of the probe in axial direction relative to the head piece is not found in Wattley. When moving the toolin Wattley it retracts the clamping arms while the tube stays stationary. Wattley is designed to clamp some electrical remote wires, hence the flexible hose. Furthermore, the jaws are configured for clamping and pulling a wire. Wattley does not disclose that the end portions are substantially transverse to the longitudinal axis.

The entire tool has a structure suitable for its purpose but not for ophthalmologic surgery and does not read on claim 1 or amended claim1.

In view of the foregoing, it is believed that the claims are patentable over the prior art.

As for the rejection of the retained dependent claims, these claims depend on claim 1, share its presumably allowable features, and therefore it is respectfully submitted that these claims should also be allowed.

Withdrawal of the rejection of claims 1, 7, 9, 10 and 15 under 35 U.S.C. §102(b) and allowance thereof are thus respectfully requested.

**REJECTION OF CLAIMS 1, 7, 8, 11, 12, 13, 14 AND 15 UNDER 35 U.S.C. §102(b) AS BEING ANTICIPATED BY YOON.**

The claim as currently presented distinguishes over the cited reference to Yoon. Yoon discloses an endoscopic instrument for grasping clamping and cutting. The instrument is configured with a handle and a first tube 14 supported in the proximal end of the via a toothed gear and which is movable in axial direction . The instrument is provided with two arms that is provided with a toothes clamping surface at the distal end. In operation, the instrument can grasp for example a piece of tissue by means of the clamping function and cut by means of the cutting edges.

Yoon, like the foregoing instruments are designed and configured for clamping and cutting and not for hold and retaining alone as the claimed endoscopic instrument. Yoon does not disclose the arcuate end portions, nor does it disclose the outside walls as being tapered off. Yoon always has a clamping and cutting function, which is why the clamping arms are not provided with a recess but only with a cutting edge. Yoon does not disclose that the end portions are substantially transverse to the longitudinal axis.

**CLARIFICATION AMENDMENT**

Applicant has amended the specification to correct spelling errors and errors occasioned by the translation of the original German text.

With respect to paragraph [0033] "micro strikers" was corrected into 'micro structures'. With respect to paragraph [0054] the correct phrase is "closed position" instead of "open position". This is supported by the German text on page 12 second to last line. The remaining corrections in the paragraphs are self explanatory and no further comment is believed necessary, except to state that no new matter has been introduced into the application by virtue of these amendments.

**CITED REFERENCES**

Applicant has also carefully scrutinized the further cited prior art and finds it without any relevance to the newly submitted claims. It is thus felt that no specific discussion thereof is necessary.

**CONCLUSION**

Applicant believes that when the Examiner reconsiders the claims in the light of the above comments, he will agree that the invention is in no way properly met or anticipated or even suggested by any of the references however they are considered.

None of the references discloses a miro-surgical instrument with the tissue holding capacity with specially configured arms ending in substantially transversely configured end portions.

In view of the above presented remarks and amendments, it is respectfully submitted that all claims on file should be considered patentably differentiated over the art and should be allowed.

Reconsideration and allowance of the present application are respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

The Commissioner is hereby authorized to charge fees which may be required, or credit any overpayment to Deposit Account No. 06-0502.

Respectfully submitted,

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